

the ascending margin finely denticulated, the teeth almost disappearing at the top; towards the angle the teeth become stronger and point downwards; they are also stronger and more scattered along the basal margin, inclining here a little forwards. Opercle with two flat sharp points, one a little below the upper angle, the other about the middle and terminating the gill cover. Both the subopercle and interopercle have their margins obscurely denticulated: the margin of the former is rather sinuous, and passes obliquely forwards and downwards to form a continuous curve with that of the latter. Crown, forehead, upper part of the snout as far as the connecting line of the nostrils, posterior half of the suborbitals, cheeks, and all the pieces of the gill cover, excepting the lower limb of the preopercle, covered with small scales, which are in most instances ciliated with a varying number of denticles, and feel rough to the touch: the extremity of the snout, anterior portion of the suborbitals, maxillaries, and lower jaw are naked. Above each orbit is a small semi-circular granulated plate, with the granulations disposed in striæ. The suprascapulars terminate in an obtuse projecting point. The humeral bone forms a large osseous triangular plate above the pectorals, the salient angle terminating in three small teeth. Course of the lateral line a little above one-third of the depth till it arrives beneath the second dorsal, where it bends down to half the depth. Scales on the body larger than those on the head, of an oblong form, rounded at their free edges, which are scarcely at all ciliated, and for the most part quite smooth to the touch; their concealed portion not wider than the free, with a fan of fourteen striæ; the rest of their surface more finely striated. The first dorsal commences a little beyond a vertical line from the termination of the humeral plate, and is almost continuous with the second, being only separated by a deep notch; the space occupied by the two dorsals together is exactly one-third of the entire length: spines strong; the first scarcely more than one-third the length of the second, which is very little shorter than the third; this last longest, equalling rather more than half the depth; rest of the spines gradually decreasing to the last, which is of the same length as the first. The second dorsal commences with a slender spine, not half the length of the first soft ray, which last is simple, the others being branched; third and fourth soft rays longest; the succeeding ones slowly decreasing to the last, which is rather more than half the longest. Anal preceded by three spines, the first of which is very short; second much longer and very stout; third of about the same length as the second, but much slenderer; the first and second separated by a wide membrane from the third, which is closely united to the first soft ray; these last longer than those of the second dorsal, but in other respects similar. The anal and second dorsal terminate in the same vertical line; and the last ray is double in both fins. Between them and the caudal is a space equalling one-fifth of the entire length. The caudal is slightly notched. The pectorals are rather pointed, their length equalling two-thirds that of the head. Ventrals immediately beneath them, and of about the same length; the first soft ray longest, and more than twice the length of the spine which precedes it.

COLOUR.—In spirits this fish appears yellowish brown, deepening on the back but becoming paler on the belly, and covered all over with small dusky spots, one occupying the base of each scale.

Habitat, Santa Cruz River, Patagonia.

No true perch had been obtained from South America until M. D'Orbigny discovered one in the Rio-Negro, in North Patagonia, which has been since described by Valenciennes, under the name of *P. trucha*.\* The present species was found dead by Mr. Darwin, high up the river of Santa Cruz, in South Patagonia. It is evidently very closely allied to the *P. trucha*, and is spotted in a similar manner; but it appears to differ in the scales not advancing on the snout beyond the nostrils, or covering more than the posterior half of the suborbitals. Those on the body are also particularly characterized by being so smooth, as hardly to communicate any sensation of roughness when the hand is passed from the tail towards the head, though the head itself is rough. This circumstance has suggested the specific name. This species further disagrees with the one above alluded to in having the caudal slightly forked, not rounded; and in having two soft rays less in the second dorsal, and one less in the anal. Valenciennes's description, however, of the *P. trucha* is very brief; on which account I have been the more minute in that of the *P. lævis*.

This perch, with *P. trucha*, would almost seem to form a subordinate division in the genus, distinguished from that embracing all the other described species, by the character of the scales covering a large portion of the head which gives it a remarkable sciænoid appearance. Both species may be known from all the North American perches, by their having the body spotted instead of banded, and by the smaller number of rays in the first dorsal. In this last character they agree with the *P. ciliata*, and *P. marginata* of Cuvier and Valenciennes.

# 1. SERRANUS ALBO-MACULATUS. Jen.

## PLATE II.

*S. lateribus maculis albis serie longitudinali dispositis; dentibus velutinis; paucis, hic et illic sparsis, fortioribus, aculeiformibus, vel sub-conicis; preoperculo margine ascendenti convexiusculo, denticulato; denticulis ad et infra angulum paulò majoribus; operculo mucronibus duobus parvis, et spinâ intermediâ forti, armato; rostro et maxillis nudis; squamis corporis leviter ciliatis; pinna caudali æquali.*

B. 7; D. 10/13; A. 3/7; C. 17, &c.—P. 17; V. 1/5.

LONG. unc. 16; lin. 9.

FORM.—Of an oblong-oval form, with the greatest depth about one-fourth of the entire length. The dorsal and ventral lines are of nearly equal curvature. The profile is nearly rectilineal,

\* *Hist. des Poiss.* tom. ix. p. 317. I refer to the quarto edition throughout.